

34. CORRECTIONS AND ADDITIONS TO THE PTERIDOPHYTIC FLORA OF KODAIKANAL (SOUTH INDIA)

Some years ago we (Bir & Vasudeva 1971) published a taxonomic account of ferns and fern-allies of Kodaikanal situated on the Palni Hills in Madurai district of the state of Tamil Nadu, South India. Further collections made in 1975 and re-examination of the material earlier collected, have revealed several new points about the specific determinations. Also information is given about the latest valid name or about the original publication of the specific names which were earlier given either incompletely or wrongly. The chief points as brought out in the present studies are as follows:

1. *Botrychium lanuginosum* Wall. ex Hook. & Grev., Ic. Fil. 1. t 79.1831.
2. Two specimens (PAN¹ 4781, 4782) cited under *Lygodium flexuosum* (L.) Sw. (Bir & Vasudeva 1971, p. 176) really belong to *L. japonicum* (Thunb.) Sw. and are possibly of cultivated origin.
3. *Adiantum lunulatum* Burm. (= *A. philipense* L.) Specimen PAN 4828 Coll. Bir (Motor road, 600 m. on shaded moist rocks) may be an escape from cultivation since it was not collected again from the area.
4. *Cheilanthes bulbosa* Kunze, Linnaea 24: 274.1851; Bedd. Ferns S. India t. 192. 1864; Nayar, Bull. nat. Gdns. Lucknow 68: 27.1962.
Specimens: PAN 4518, 4519 Coll. Bir and PAN 5765, 5766 Coll. Vasudeva 55.
Earlier (Bir & Vasudeva 1971, p. 177) recorded as *C. chrysophylla* Hook. Omit reference to Mehra & Bir (1964, p. 109).
5. *Mecodium javanicum* (Spreng) Copel. (*Hymenophyllum javanicum* Spreng).
Specimen: PAN 4788 Coll. Bir (Shembaganur, 1800 m. on shaded rock). May be an escape from cultivation because it was not found again in 1966 and 1975 excursions.
6. *Doryopteris concolor* (Langsd. & Fish) Kuhn in V. Decken Reissen Ostafri. 313: 19. 1879.
Earlier recorded as *Pellaea geranoides* (Raddi) Fée by Bir and Vasudeva (1971).
7. *Lindsaya odorata* Roxb., Calc. J. Nat. Hist. 4: 511.1846; Kramer, Blumea 15: 567. 1968; Gdns. Bull. Singapore 26: 40.1972.
Specimens: PAN 4501, 4502 Coll. Bir and PAN 5782, 5783 Coll. Vasudeva 74.
Earlier recorded as *L. cultrata* (Willd.) Swartz. in Bir & Vasudeva (1971). Omit reference to Mehra & Bir (1964, p. 118). The Kodaikanal specimens belong to var. *odorata* and are quite variable in size, from 10-50 cm depending upon the habitat.
8. South Indian (from Kodaikanal) specimens of *Dicranopteris linearis* (Burm.) Underwood belong to var. *sebastiana* Panigrahi & Dixit (1971).
9. *Pseudophegopteris pyrrhorhachis* (Kunze) Ching, Acta Phytotax. Sinica 8: 315. 1963. *Polypodium paludosum* Bedd., Ferns S. India t. 168.1864 (non Blume).
Earlier recorded as *Thelypteris brunnea* Ching (Bir & Vasudeva 1971, p. 187).
10. *Stegnogramma pozoi* (Lagasca) Iwatsuki, Acta Phytotax. Geobot. 19: 124.1963; Holtt., Jour. South Afr. Bot. 40: 149. 1974.
Earlier recorded as *Leptogramma totta* J.

¹ Abbreviation for Herbarium, Punjab University, Chandigarh, India.

MISCELLANEOUS NOTES

- Smith (Bir & Vasudeva 1971, p. 188).
11. *Christella parasitica* (L.) Lév., Fl. Kouy-tchéou: 475.1915; Holtt., Kew Bull. 31: 309.1976. *Nephrodium procurrens* (Mett.) Bak., Syn. Fil. 290.1867; Bedd., Handb. Suppl. 67.1892 (pro parte). *Nephrodium molle* var. *didymosorum* (Parish ex Bedd.) Bedd., Handb. 279.1883.
- Earlier recorded as *Cyclosorus parasiticus* (L.) Farwell (Bir & Vasudeva 1971, p. 188).
12. *Christella dentata* (Forsk.) Brownsey & Jermy, Brit. Fern Gaz. 10: 338. 1973; Holtt., Jour. S. Afri. Bot. 40: 143.1974; Kew Bull. 31: 314.1976. *Cyclosorus sub-pubescent* sensu Holtt., Rev. Fl. Malaya 2: 273. t. 24. t. 157.1955 (non Blume).
- Earlier recorded as *Cyclosorus dentatus* (Forsk.) Ching (Bir & Vasudeva 1971, p. 188).
13. *Cyclosorus interruptus* (Willd.) H.I. to, Bot. Mag. Tokyo 51: 714.1937. *Nephrodium unitumi* quod. Bedd., Handb. 268. 1883.
- Earlier recorded as *C. gongilodes* (Schkuhr) Link (Bir & Vasudeva 1971, p. 188).
14. *Sphaerostephanos arbuscula* (Willd.) Holtt., Jour. S. Afr. Bot. 40: 164. 1974.
- Earlier recorded as *Cyclosorus arbusculus* (Willd.) Ching (Bir & Vasudeva 1971, p. 188).
15. *Pseudocyclosorus tylodes* (Kunze) Ching, Acta Phytotax. Sinica 8: 324.1963 (*xyloides* as an error). *Nephrodium osthodes* var. *xyloides* Bedd., Handb. 240.1883. *Nephrodium xyloides* (Kunze) Hope, J. Bombay nat. Hist. Soc. 14: 724.1903.
- Earlier recorded as *Thelypteris xyloides* (Kunze) Ching (Bir & Vasudeva 1971, p. 187).
16. *Pseudocyclosorus ochthodes* (Kunze) Holttum in Nayar & Kaur Companion to Bedd. Handb. 204.1974. *Thelypteris och-*
- thodes* (Kze.) Ching. Bull. Fan Mem. Inst. Biol. Bot. 6: 300.1936.
- Specimens: PAN 4491, 4494 Coll. Bir; PAN 5838, 5839 Coll. Vasudeva 108. Det. R. E. Holttum.
- Earlier recorded as *Thelypteris repens* (Hope) Ching and *T. erubescens* (Wall. ex Hook.) Ching by Bir & Vasudeva (1971, p. 187). Omit reference to Mehra & Bir (1964).
- 16A. *Thelypteris* sp.
- Specimen: PAN 4709 (Observatory hill road, 2100 m.) is not *T. beddomei* (Bak.) Ching as reported earlier (Bir & Vasudeva 1971, p. 187) and might be a hybrid.
17. *Phanerophlebia caryotideoides* (Wall. ex Hook. & Grev.) Copel. Gen. Fil. 111.1947. *Cyrtomium falcatum* var. *caryotideum* (Wall.) Bedd., Ferns S. India t. 119.1864.
- Earlier recorded as *Cyrtomium caryotideum* Presl (Bir & Vasudeva 1971, p. 183).
18. *Dryopteris approximata* Sledge, Bull. Brit. Mus. nat. Hist. Bot. 5: 11.1973.
- Specimens: PAN 5855, 5856 Coll. Vasudeva, 96.
- Earlier recorded as *Dryopteris ramosa* (Hope), C. Chr. by Bir & Vasudeva (1971, p. 184). Exclude synonym *Nephrodium ramosum* Hope.
19. *Arachniodes conifolia* (Moore) Ching, Acta Bot. Sinica 50: 153. 1960.
- Specimens: PAN 5844, 5845 Coll. Vasudeva 68.
- Not *A. speciosa* (Don) Ching as earlier recorded by Bir & Vasudeva (1971, p. 183). Omit reference to Mehra & Bir (1964).
20. *Elaphoglossum stelligerum* (Wall. ex Bak.) Moore ex Alston & Bonner, Candollea 15: 216.1956; Sledge, Bull. Brit. Mus. Nat. Hist. Bot. 4: 92.1967.
- Specimens: PAN 4814, 4815 Coll. Bir; PAN 5842, 5843 Coll. Vasudeva 141.
- Earlier recorded as *E. petiolatum* (Sw.)

Urban and *E. conforme* (Sw.) Schott. (Bir & Vasudeva 1971, p. 184). Omit *E. viscosum* Schott as Synonym.

21. *E. angulatum* (Bl.) Moore Index Fil. 5.1857; Sledge, Bull. Brit. Mus. nat. Hist. Bot. 2: 83.1967.

Specimens: PAN 5840, 5841 Coll. Vasudeva 147.

Earlier recorded as *E. laurifolim* (Thouars) Moore (Bir & Vasudeva 1971, p. 183). Out reference to Mehra & Bir (1964).

22. *Dryoathyrium boryanum* (Willd.) Ching, Bull. Fan Mem. Inst. Biol. Bot. 11: 81. 1941; Sledge, Bull. Brit. Mus. Nat. Hist. Bot. 2: 282. Pl. 30.t.1.1962.

Grows in a shola below Palni ghat road, 1400 m. altitude. Few individuals were seen only in this locality. Based on collections made in February, 1975 (PUN² 2073-2076 Coll. Vasudeva 1185).

23. *Athyrium pectinatum* (Wall.) Presl

Specimen: PAN 4790 Coll. Bir (Lake, 2, 100 m.) is a North Indian (Himalayan) species and must be an escape from cultivation.

24. *Asplenium formosum* Willd. in Linn.

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May 16, 1978.

Spec. Plant ed. 4, 5: 329. 1810; Sledge, Bull. Brit. Mus. nat. Hist. Bot. 3: 243. 1965.

Abundant on humus covered mountain slopes only in the forest near Bear Shola, 2150 m. Collected in January, 1975 (PUN 2130-2133 Coll. Vasudeva 1149).

25. *Pyrrosia stictica* (Kunze) Holttum, Novit. Bot. Inst. Bot. Univ. Carol. Prague 31. 1968. *Polypodium porosum* Wall., Cat. no. 266.1828 (nom. nud.).

Specimens: PAN 4820, 4821 Coll. Bir: PAN 5869, 5870 Coll. Vasudeva 75.

Earlier reported as *Pyrrosia mollis* (Kze.) Ching (Bir & Vasudeva 1971, p. 192).

In this species ventral hairs are with crisped arms unlike *P. mollis* in which hairs are uniform with straight arms.

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PANIGRAHI, G. & DIXIT, R. D. (1971): Two new varieties of *Dicranopteris linearis* (Burm.) Underw. from India. *Bull. Bot. Surv. India* 13: 162-163.

² Abbreviation for Herbarium, Punjabi University, Patiala-147 002, India as included "Index Herbariorum", 1974 ed.